

an electrical switch on the handle to turn on or turn off electricity running to the electric motor.

REMARKS

The examiner pointed out that "axle" was misspelled in claim 1.

Claim 1 has been amended to correct the spelling.

The examiner stated that there was no antecedent basis for "the pair of drive wheels" in claims 9 and 10.

Both claims have been amended to read "pair of ground engaging wheels" which has an antecedent basis.

The examiner rejected claims 1-13, 15, 17 and 18 as being obvious over Anderson (809) in view of Fisher (805).

Anderson teaches both the drive wheels and cutting blade being driven by the electric motor. This uses a lot of mechanical connections, which causes waste of energy in the form of friction between the parts.

Fisher uses separate hydraulic motors for rotating the brush and for driving the wheels (in one direction only). Fisher also uses an internal combustion engine rather than an electric motor to power his device. Claim 1 specifies an electric motor for driving the hydraulic pump.

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The direct combination of Fisher and Anderson would not yield the claimed invention. Only unobvious selected features of each invention would have to be chosen to make the new combination.

Neither Fisher nor Anderson teaches the use of hydraulics for driving the wheels while retaining the electric motor for directly driving the blade. The advantage of the direct drive of the blade is that it is always on with a forceful direct mechanical connection to the motor. The advantage of hydraulically driving the drive wheels is that it has a slower acceleration and deceleration over a direct drive link to the electric motor for smoother operation. This provides for a less jerky operation of the floor stripper and thus a better stripping action on the floor. Further, driving the wheels with hydraulics provides an independent control of the speed and direction of the stripper compared to the speed of the electric motor. It would not be obvious that these advantages would result from using a portion of the Fisher features combined with a portion of Anderson features.

Further the use of the hydraulic motor for driving the wheels reduces the electricity used since there is less frictional loss of energy for hydraulics driving the machine than in a mechanical connection to the wheels.

It would not be obvious that these advantages would result from using a portion of the Fisher features combined with a portion of Anderson features. Therefore claim 1 is allowable over the references.

In rejecting claim 2 the examiner stated that Fisher teaches that the valve controls the direction of the drive wheels.

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Fisher does not teach forward and reverse powered hydraulic motors. Fisher specifies that the motor shaft is locked against reverse direction when it is not turning in the forward direction (see column 4 line 44-48).

Since Fisher does not teach reverse motion by use of the hydraulic motor as the examiner stated, claim 2 should be allowed.

The examiner rejected claims 3 and 4 stating that Fisher shows a variable hydraulic drive wheel speed.

Fisher has two hydraulic speed controls one for each hydraulic motor. The applicant only has one hydraulic speed control since there is only one hydraulic motor. Fisher also has a hydraulic circuit in series such that the drive wheels must be engaged for the brush to rotate, whereas in claim 3 the wheels and the blade are operated separately, the wheels by a hydraulic motor and the blade by a direct drive from the electric motor. Further since claims 3 and 4 are dependent on allowable claims 1 and 2, claims 3 and 4 are also allowable.

The examiner stated that Anderson teaches a handle therefore claim 5 is obvious.

Since claim 1 is allowable dependent claim 5 is also allowable.

The examiner stated Fisher teaches a valve in the handle making claim 6 obvious.

The examiner is not correct Fisher does not show a valve in the handle. The valves in Fisher are numbered 34 and 36.

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In Fisher at column 2 lines 62-66 it states: "A relief valve 32 is secured to the base portion 8. A forward/reverse valve 34 for the drive wheels 12 is secured to the hollow tube 18. A broom rotation valve 36 and an oil filter assembly 38 are secured to the hollow tube 18."

None of the valves are in the handle. Further since none of the valves are in the handle none of the hydraulic lines are in the handle. The applicant has amended claim 6 to specify that the hydraulic lines are also in the handle.

Since the claims are to a valve and hydraulic lines in the handle which is not shown in Fisher the claims are not obvious as the examiner stated. Claim 6 is therefore allowable.

The examiner rejected claim 7 as being obvious over Anderson in view of Fisher.

As pointed out above for claim 1 the combination of Anderson and Fisher would not directly yield the invention. In addition to the features described above for claim 1 claim 7 also differs from Anderson and Fischer because of the hydraulic circuit claimed. Claim 7 has a hydraulic circuit, which differs from that of Fisher. The Fischer control valve mechanism has two hydraulic pumps and two control valve mechanisms. Claim 7 has one hydraulic motor and one control valve mechanism. Therefore claim 7 should be allowed.

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The examiner rejected claim 8 for obviousness stating Fisher teaches the valve controls the direction of rotation of the ground engaging wheels.

As pointed out above for claim 2 Fisher does not have a reverse mode as the examiner stated. Therefore claim 8 should be allowed over the examiners rejection.

The examiner rejected claim 9 and 10 as being obvious since Fisher teaches valve controls for speed of the ground engaging wheels.

Fisher has two hydraulic speed controls one for each hydraulic motor. The applicant only has one hydraulic speed control since there is only one hydraulic motor. Fisher also has a hydraulic circuit in series such that the drive wheels must be engaged for the brush to rotate, whereas in claim 8 the wheels and the blade are operated separately, the wheels by a hydraulic motor and the blade by a direct drive from the electric motor. Therefore claims 9 and 10 are allowable.

Further, since claims 9 and 10 are dependent on allowable claims 7 and 8, claims 9 and 10 are allowable.

The examiner rejected claim 11 as being obvious since Fisher teaches a safety valve 32.

As pointed out above the hydraulic circuit is different, the claim is for the safety relief valve to be in the hydraulic valve mechanism. In Fisher the relief valve is a separate unit attached on the side of the frame. Further since claim 11 is dependent on allowable claims 10, 8 and 7, as shown above, it is also allowable.

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The examiner rejected claim 12 as being obvious stating that it would be obvious to use valve 32 to provide flow from the pump to the tank to reduce operator fatigue.

It is believed that the examiner made a misstatement as operator fatigue is not involved in the use of this valve.

Claim 12 is a dependent claim depending from an allowable base claim or intervening claim and is therefore allowable.

The examiner stated claim 13 was rejected as obvious over Anderson in view of Fisher since Anderson shows the handle and Fisher shows the valve in the handle.

Fisher does not show the valve in the handle as the examiner stated. Further the claims have been amended to show that the hydraulic lines and the valve are in the handle. Since these features are not in the prior art references they are not obvious in view of the references. Further claim 13 is a dependent claim depending from an allowable base claim or intervening claim and is therefore allowable.

The examiner rejected claim 15 as being obvious in view of Fisher, which teaches the control device.

Claim 15 is a dependent claim depending from an allowable base claim or intervening claim and is therefore allowable.

The examiner rejected claim 17 as being obvious in view of Anderson, which teaches the handle.

Claim 17 is a dependent claim depending from an allowable base claim or intervening claim and is therefore allowable.

The examiner rejected claim 18 as being obvious in view of Fisher, which teaches a valve in the handle to reduce operator fatigue.

Fisher does not have a valve in the handle, and does it reduce operator fatigue. Therefore the claim is allowable. Further, claim 18 is a dependent claim depending from an allowable base claim or intervening claim and is therefore allowable.

The examiner rejected claims 14 and 16 as obvious in view of Anderson, Fisher and Hancock. The examiner stated Hancock shows solenoid operated cartridge valves.

Hancock is a valve adapter for converting a manually controlled hydraulic valve to an electrically controlled valve. The claims do not have anything to do with converting a manually actuated hydraulic valve to an electrically actuated hydraulic valve.

Claim 14 is to first and second switches on the handlebars for forward and reverse control. This feature is not found with the combination of references shown by the examiner and is therefore allowable.

Similarly claim 16 is not found in the references. Claim 16 is a default position in the hydraulics to circulate the hydraulic fluid from the pump to the reservoir when the device is not in the forward or reverse mode.

None of the prior art references have this feature and therefore it is allowable.

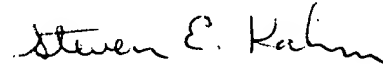
The new claims 19-22 show the detailed hydraulic circuit, which is not found in the prior art. All of the new claims are believed to be a new combination not shown in the prior art and not obvious in view of the prior art and are therefore allowable.

All the claims are believed to be allowable.

Respectfully submitted,

NIKOLAI & MERSEREAU, P.A.

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Steven E. Kahm
Attorney for Applicant
Registration No. 30860
900 Second Avenue South
Suite 820
Minneapolis, MN 55402
Phone: 612-339-7461

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